

Bianca Plouffe
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Employment

Vice-Chancellor's Fellow

School of Medicine, Dentistry and Biomedical Sciences
Queen's University Belfast
Belfast, United Kingdom
06 Nov 2018 → present

Wellcome-Wolfson Institute for Experimental Medicine

Queen's University Belfast
United Kingdom
06 Nov 2018 → present

Research Interests

DR PLOUFFE'S PATH TOWARD HER ACTUAL RESEARCH PROGRAMME

Dr Plouffe completed biochemistry undergraduate studies at Université de Sherbrooke (QC, Canada) (2000-2003). Then, she quickly developed a marked interest for G protein-coupled receptor (GPCR) signalling. As GPCRs represent the largest family of cell surface proteins, and control a vast repertoire of physiological functions, these receptors are the actual target of 30-50% of all prescribed drugs. She started her journey in this exciting research field by investigating the molecular mechanisms involved in the angiotensin type 2 receptor (AT₂R)-mediated neurite outgrowth as a MSc student (2003-2005). This work contributed to the understanding of the mechanisms underlying neuronal differentiation required for brain development. During her MSc studies, Dr Plouffe also contributed to the characterisation of new selective AT₂R agonists in collaboration with research teams from Uppsala University (Sweden). Then, Dr Plouffe completed a PhD in Neuroscience at University of Ottawa (ON, Canada) (2006-2011), where she identified the molecular mechanisms involved in the opposite regulation of dopamine D1 and D5 receptors by protein kinase C. Her work shed light on the mechanisms underlying the positive action of prefrontal cortex on motor activity and of the thalamic parafascicular nucleus on awareness.

Dr Plouffe decided to pursue her research in the field of GPCR signalling by completing a postdoctoral training at the Institute for Research in Immunology and Cancer, part of University of Montreal (QC, Canada) (2012-2018) as part of Prof Michel Bouvier's research team, a world-wide recognised expert in the field of GPCR signalling. During her postdoctoral training, Dr Plouffe used Bioluminescence Resonance Energy Transfer (BRET)-based technology to tackle important questions related to GPCRs involved in metabolic disorders. In collaboration with Prof Ralf Jockers from Institut Cochin (France), she investigated the signalling parameters of the melatonin type 2 receptor preventing development of type 2 diabetes. She also worked on the ghrelin receptor, involved in energy homeostasis and food intake, in collaboration with Prof Birgitte Holst (University of Copenhagen). This study led to the identification of the ghrelin receptor-induced biased signalling mediated by a new compound responsible for unique physiological outcomes observed in murine model. This was one of the rare studies translating biased signalling from a receptor to in vivo functions.

Dr Plouffe had also the joy to participate to a jointed collaboration with Prof Robert J. Lefkowitz, a Nobel Laureate from Duke University (USA), and Prof Georgios Skiniotis, an expert in electron cryomicroscopy (cryoEM) from Stanford University (USA) on a project that was particularly inspiring and determinant for her actual research programme. Classically, G protein activation by GPCRs occurs at the plasma membrane and is rapidly terminated by the recruitment of a protein called β -arrestin to the activated GPCRs. This promotes G protein uncoupling from receptor, GPCR internalisation and signalling arrest. However, during the past decade, emerging evidence suggest that many GPCRs can continue to activate G proteins from internal compartments after they have been internalized. This fruitful collaboration allowed to appreciate the important role of β -arrestin in this novel type of G protein signalling and provided strong evidence for the formation of signalling complexes (called megaplexes) composed of the GPCR, G proteins and β -arrestin.

DR PLOUFFE'S RESEARCH PROGRAMME

The spatiotemporal properties of GPCRs signalling in intracellular compartments are different than those of GPCRs signalling at the plasma membrane. The absence of desensitising effect of β -arrestin on GPCRs signalling in intracellular compartments is generally translated to a sustained and prolonged signalling as opposed to the transient kinetic observed for GPCRs signalling at the plasma membrane. Furthermore, G protein signalling in intracellular compartments such as

endosomes and Golgi allows a proximity with the nucleus, which favours the modulation of transcription factors, leading to changes in gene expression. As a newly appointed Vice-Chancellor's Fellow and principal investigator at Queen's University Belfast, Dr Plouffe aims to tackle important mechanistic questions underlying this novel signalling mode. Importantly, she wants to take advantage of the different spatiotemporal properties of compartmentalised G protein signalling to design new pharmacological approaches to fight several diseases. Dr Plouffe's current targets are type 2 diabetes, glioblastoma multiforme, melanoma, and atherosclerosis.

CURRENT PROJECTS IN THE LAB

1- To answer the following mechanistic questions concerning compartmentalised G protein signalling and megaplex formation:

Is G protein selectivity different at intracellular compartments vs. at plasma membrane?

Is megaplex formation restricted to Gas isoform?

What is the specific role of β -arrestin within the megaplex?

2- To investigate the role of endosomal G protein signalling by the viral chemokine GPCR US28 in glioblastoma multiforme (GBM) malignancy using glioblastoma cells (U251).

Determine the constitutive G α q protein spatial activation profile of US28 in these cells.

Determine the effect of reduced US28 constitutive internalisation on this spatial activation profile.

Evaluate the role of endosomal US28 signalling in proliferation, invasiveness, angiogenesis, and inflammation in these cells.

Use of pH-sensitive nanoparticles to deliver drugs or nanobodies directly into endosomes to block US28 and characterisation of these encapsulated drugs on US28-induced signalling and GBM malignancy.

3- To investigate compartmentalised G protein signalling by the chemokine GPCR CCR7, involved in melanoma by comparing 2 biased agonists (CCL19 and CCL21) for their respective ability to induce:

β -arrestin recruitment to CCR7

Internalisation of CCR7

G α i activation by CCR7 at the plasma membrane and in endosomes

4- To investigate the role of endosomal Gas activation in GLP1R-induced insulin secretion by rat insulinoma INS-1 832/3 cells.

Design and physically characterise pH-sensitive mesoporous silica nanoparticles (MSNs) cloaked with a pegylated liposome covalently linked to exendin-4 (ex4-MSNs) loaded with exendin-4 (ex4-MSN-ex4) or empty (ex4-MSN- Φ).

Measurement of MSNs uptakes by INS-1 832/3 cells in presence or absence of internalisation inhibitors.

Measurement of the following GLP1R-mediated Gs signalling at plasma membrane and in early endosomes upon stimulation with exendin-4, ex4-MSN-ex4, or ex4-MSN- Φ .

Measurement of insulin secretion by INS-1 832/3 cells upon stimulation with exendin-4, ex4-MSN-ex4, or ex4-MSN- Φ .

GROUP MEMBERS

Technicians:

Mr Shane Houston 2019-Present

PhD Students:

Miss Carole Daly 2019-Present

Project: Non-canonical G protein signalling of US28 as a new target for glioblastoma.

MSc Students:

Mr Stephen Copeland 2019-2020

Project: Non-canonical G protein signalling of US28 as a new target for glioblastoma.

Undergraduate Students:

Mr Adam McShane 2019-2020

Summer Students:

Miss Éloïse Heulet 2019 (Advanced Biology, Université de Nantes, France)

Miss Lenka Toderova 2019 (Nuffield Research Placement)

Mr Cole Roberts 2019 (Medical School, University of Dundee, UK)

COLLABORATORS

National:

Prof David Grieve (WWIEM, Queen's University Belfast)

Dr Emma Evergren Mills (CCRCB, Queen's University Belfast)

Dr Irina Tikhonova (School of Pharmacy, Queen's University Belfast)

Prof Qingbo Xu (King's College London)

Dr Alejandra Tomas (Imperial College London)

Prof I. Sadaf Farooqi (Wellcome-MRC Institute of Metabolic Science, University of Cambridge)

International:

Prof Martine J. Smit (Vrije Universiteit Amsterdam, Netherlands)

Prof Nigel W. Bunnett (New York University, USA)

Dr Alex Thomsen (New York University, USA)

Dr Arun K. Shukla (Indian Institute of Technology Kanpur, India)

Current funded projects

Prizes and Awards

2018

Vice-Chancellor's Fellowship from Queen's University Belfast (U.K.) (£202.000)

Plouffe, Bianca (Recipient), 06 Nov 2018

Prize: Fellowship awarded competitively

2017

Travel Award from the Institute for Research in Immunology and Cancer (Canada) (\$1000)

Plouffe, Bianca (Recipient), Jun 2017

Prize: Prize (including medals and awards)

2016

Étudiants-Chercheurs Étoiles Award from Fonds de la Recherche du Québec en Santé (Canada) (\$1000)

Plouffe, Bianca (Recipient), Oct 2016

Prize: Prize (including medals and awards)

Postdoctoral Fellowship Award from Diabetes Canada (\$80.000)

Plouffe, Bianca (Recipient), Jul 2016

Prize: Fellowship awarded competitively

2012

Postdoctoral Fellowship Award from Fonds de la Recherche du Québec en Santé (Canada) (\$90.000) - declined

Plouffe, Bianca (Recipient), Apr 2012

Prize: Fellowship awarded competitively

Postdoctoral Fellowship Award from the Canadian Institutes for Health Research (\$135.000)

Plouffe, Bianca (Recipient), Apr 2012

Prize: Fellowship awarded competitively

2010

Tuition Fee Scholarship from University of Ottawa (Canada) (\$5.500)

Plouffe, Bianca (Recipient), Sep 2010

Prize: Fellowship awarded competitively

Best Poster Award at the 2nd Brain Health Research Day from University of Ottawa (Canada) (\$100)

Plouffe, Bianca (Recipient), Jun 2010

Prize: Prize (including medals and awards)

2009

Best Poster Award at the 1st Brain Health Research Day from University of Ottawa (Canada) (\$100)

Plouffe, Bianca (Recipient), Jun 2009

Prize: Prize (including medals and awards)

2008

Graduate/Postdoctoral Travel Award from the American Society for Biochemistry & Molecular Biology (USA) (\$1000)

Plouffe, Bianca (Recipient), Apr 2008

Prize: Prize (including medals and awards)

2007

Doctoral Studentship Award from Fonds de la Recherche du Québec en Santé (Canada) (\$60.000)

Plouffe, Bianca (Recipient), Sep 2007

Prize: Fellowship awarded competitively

Excellence Scholarship from University of Ottawa (Canada) (\$18.000)

Plouffe, Bianca (Recipient), Sep 2007

Prize: Fellowship awarded competitively

2005

Best Poster Award from Société de Neuroendocrinologie (France) (€500)

Plouffe, Bianca (Recipient), May 2005

Prize: Prize (including medals and awards)

2004

Best Oral Presentation Award from Équipe de Physiopathologie Endocrinienne (Canada) (\$200)

Plouffe, Bianca (Recipient), Sep 2004

Prize: Prize (including medals and awards)

Research outputs

Emerging Role of Compartmentalized G Protein-Coupled Receptor Signaling in the Cardiovascular Field. / Plouffe, Bianca ; Thomsen, Alex R.B.; Irannejad, Roshanak .

In: ACS Pharmacology & Translational Science, Vol. 3, No. 2, 24.02.2020, p. 221-236.

Research output: Contribution to journal › Review article

Translating biased signaling in the ghrelin receptor system into differential in vivo functions. / Mende, Franziska; Hundahl, Cecilie; Plouffe, Bianca; Skov, Louise Julie; Sivertsen, Bjoørn; Madsen, Andreas Nygaard; Lückmann, Michael; Diep, Thi Ai; Offermanns, Stefan; Frimurer, Thomas Michael; Bouvier, Michel; Holst, Birgitte.

In: Proceedings of the National Academy of Sciences of the United States of America, Vol. 115, No. 43, 23.10.2018, p. E10255-E10264.

Research output: Contribution to journal > Article

Manifold roles of β -arrestins in GPCR signaling elucidated with siRNA and CRISPR/Cas9. / Luttrell, Louis M.; Wang, Jialu; Plouffe, Bianca; Smith, Jeffrey S.; Yamani, Lama; Kaur, Suneet; Jean-Charles, Pierre Yves; Gauthier, Christophe; Lee, Mi Hye; Pani, Biswaranjan; Kim, Jihee; Ahn, Seungki; Rajagopal, Sudarshan; Reiter, Eric; Bouvier, Michel; Shenoy, Sudha K.; Laporte, Stéphane A.; Rockman, Howard A.; Lefkowitz, Robert J.

In: Science Signaling, Vol. 11, No. 549, eaat7650, 25.09.2018.

Research output: Contribution to journal > Article

Type 2 diabetes-associated variants of the MT₂ melatonin receptor affect distinct modes of signaling. / Karamitri, Angeliki; Plouffe, Bianca; Bonnefond, Amélie; Chen, Miñ; Gallion, Jonathan; Guillaume, Jean Luc; Hegron, Alan; Boissel, Mathilde; Canouil, Mickaël; Langenberg, Claudia; Wareham, Nicholas J.; Le Gouill, Christian; Lukashova, Viktoria; Lichtarge, Olivier; Froguel, Philippe; Bouvier, Michel; Jockers, Ralf.

In: Science Signaling, Vol. 11, No. 545, eaan6622, 28.08.2018.

Research output: Contribution to journal > Article

Purinergic receptor transactivation by the β 2-adrenergic receptor increases intracellular Ca²⁺ in nonexcitable cells. /

Stallaert, Wayne; Van Der Westhuizen, Emma T.; Schönege, Anne Marie; Plouffe, Bianca; Hogue, Mireille; Lukashova, Viktoria; Inoue, Asuka; Ishida, Satoru; Aoki, Junken; Le Gouill, Christian; Bouvier, Michel.

In: Molecular Pharmacology, Vol. 91, No. 5, 06.05.2017, p. 533-544.

Research output: Contribution to journal > Article

Discovery of G Protein-Biased Dopaminergics with a Pyrazolo[1,5-a]pyridine Substructure. / Möller, Dorothee; Banerjee, Ashutosh; Uzuneser, Taygun C.; Skultety, Marika; Huth, Tobias; Plouffe, Bianca; Hübner, Harald; Alzheimer, Christian; Friedland, Kristina; Müller, Christian P.; Bouvier, Michel; Gmeiner, Peter.

In: Journal of Medicinal Chemistry, Vol. 60, No. 7, 13.04.2017, p. 2908-2929.

Research output: Contribution to journal > Article

Distinct conformations of GPCR- β -arrestin complexes mediate desensitization, signaling, and endocytosis. / Cahill, Thomas J.; Thomsen, Alex R.B.; Tarrasch, Jeffrey T.; Plouffe, Bianca; Nguyen, Anthony H.; Yang, Fan; Huang, Li Yin; Kahsai, Alem W.; Bassoni, Daniel L.; Gavino, Bryant J.; Lamerdin, Jane E.; Triest, Sarah; Shukla, Arun K.; Berger, Benjamin; Little, John; Antar, Albert; Blanc, Adi; Qu, Chang Xiu; Chen, Xin; Kawakami, Kouki; Inoue, Asuka; Aoki, Junken; Steyaert, Jan; Sun, Jin Peng; Bouvier, Michel; Skiniotis, Georgios; Lefkowitz, Robert J.

In: Proceedings of the National Academy of Sciences of the United States of America, Vol. 114, No. 10, 07.03.2017, p. 2562-2567.

Research output: Contribution to journal > Article

GPCR-G Protein- β -Arrestin Super-Complex Mediates Sustained G Protein Signaling. / Thomsen, Alex R.B.; Plouffe, Bianca; Cahill, Thomas J.; Shukla, Arun K.; Tarrasch, Jeffrey T.; Dosey, Annie M.; Kahsai, Alem W.; Strachan, Ryan T.; Pani, Biswaranjan; Mahoney, Jacob P.; Huang, Liyin; Breton, Billy; Heydenreich, Franziska M.; Sunahara, Roger K.; Skiniotis, Georgios; Bouvier, Michel; Lefkowitz, Robert J.

In: Cell, Vol. 166, No. 4, 11.08.2016, p. 907-919.

Research output: Contribution to journal > Article

Mapping physiological G protein-coupled receptor signaling pathways reveals a role for receptor phosphorylation in airway contraction. / Bradley, Sophie J.; Wiegman, Coen H.; Iglesias, Max Maza; Kong, Kok Choi; Butcher, Adrian J.; Plouffe, Bianca; Goupil, Eugénie; Bourgognon, Julie Myrtille; Macedo-Hatch, Timothy; Legouill, Christian; Russell, Kirsty; Laporte, Stéphane A.; König, Gabriele M.; Kostenis, Evi; Bouvier, Michel; Chung, Kian Fan; Amrani, Yassine; Tobin, Andrew B.

In: Proceedings of the National Academy of Sciences of the United States of America, Vol. 113, No. 16, 19.04.2016, p. 4524-4529.

Research output: Contribution to journal > Article

Constitutive activities and inverse agonism in dopamine receptors. / Zhang, Boyang; Albaker, Awatif; Plouffe, Bianca; Lefebvre, Caroline; Tiberi, Mario.
Advances in Pharmacology. Academic Press Inc.,U.S., 2014. p. 175-214 (Advances in Pharmacology; Vol. 70).
Research output: Chapter in Book/Report/Conference proceeding > Chapter

Functional analysis of human D1 and D5 dopaminergic G protein-coupled receptors : Lessons from mutagenesis of a conserved serine residue in the cytosolic end of transmembrane region 6. / Plouffe, Bianca; Tiberi, Mario.
Dopamine: Methods and Protocols. Humana Press Inc.,U.S., 2013. p. 141-180 (Methods in Molecular Biology; Vol. 964).
Research output: Chapter in Book/Report/Conference proceeding > Chapter

The third intracellular loop of D1 and D5 dopaminergic receptors dictates their subtype-specific PKC-induced sensitization and desensitization in a receptor conformation-dependent manner. / Plouffe, Bianca; Yang, Xiaodi; Tiberi, Mario.
In: Cellular Signalling, Vol. 24, No. 1, 01.01.2012, p. 106-118.
Research output: Contribution to journal > Article

Selective angiotensin II AT₂ receptor agonists with reduced CYP 450 inhibition. / Mahalingam, A. K.; Wan, Yiqian; Murugaiah, A. M.S.; Wallinder, Charlotta; Wu, Xiongyu; Plouffe, Bianca; Botros, Milad; Nyberg, Fred; Hallberg, Anders; Gallo-Payet, Nicole; Alterman, Mathias.
In: Bioorganic and Medicinal Chemistry, Vol. 18, No. 12, 15.06.2010, p. 4570-4590.
Research output: Contribution to journal > Article

Probing the constitutive activity among dopamine D1 and D5 receptors and their mutants. / Plouffe, Bianca; D'Aoust, Jean Philippe; Laquerre, Vincent; Liang, Binhui; Tiberi, Mario.
Methods in Enzymology. C. ed. Academic Press Inc.,U.S., 2010. p. 295-328 (Methods in Enzymology; Vol. 484, No. C).
Research output: Chapter in Book/Report/Conference proceeding > Chapter

In vitro irradiation of basement membrane enhances the invasiveness of breast cancer cells. / Paquette, B.; Baptiste, C.; Therriault, H.; Arguin, G.; Plouffe, B.; Lemay, R.
In: British Journal of Cancer, Vol. 97, No. 11, 03.12.2007, p. 1505-1512.
Research output: Contribution to journal > Article

Selective angiotensin II AT₂ receptor agonists devoid of the imidazole ring system. / Murugaiah, A. M.S.; Wallinder, Chalotta; Mahalingam, A. K.; Wu, Xiongyu; Wan, Yiqian; Plouffe, Bianca; Botros, Milad; Karlén, Anders; Hallberg, Mathias; Gallo-Payet, Nicole; Alterman, Mathias.
In: Bioorganic and Medicinal Chemistry, Vol. 15, No. 22, 15.11.2007, p. 7166-7183.
Research output: Contribution to journal > Article

Selective angiotensin II AT₂ receptor agonists : Arylbenzylimidazole structure-activity relationships. / Wu, Xiongyu; Wan, Yiqian; Mahalingam, A. K.; Murugaiah, A. M.S.; Plouffe, Bianca; Botros, Milad; Karlén, Anders; Hallberg, Mathias; Gallo-Payet, Nicole; Alterman, Mathias.
In: Journal of Medicinal Chemistry, Vol. 49, No. 24, 30.11.2006, p. 7160-7168.
Research output: Contribution to journal > Article

Role of tyrosine kinase receptors in angiotensin II AT₂ receptor signaling : Involvement in neurite outgrowth and in p42/p44^{mapk} activation in NG108-15 cells. / Plouffe, Bianca; Guimond, Marie Odile; Beaudry, H  l  ne; Gallo-Payet, Nicole.
In: Endocrinology, Vol. 147, No. 10, 22.09.2006, p. 4646-4654.
Research output: Contribution to journal > Article

Short pseudopeptides containing turn scaffolds with high AT₂ receptor affinity. / Georgsson, Jennie; Rosenstr  m, Ulrika; Wallinder, Charlotta; Beaudry, H  l  ne; Plouffe, Bianca; Lind  berg, Gunnar; Botros, Milad; Nyberg, Fred; Karl  n, Anders; Gallo-Payet, Nicole; Hallberg, Anders.
In: Bioorganic and Medicinal Chemistry, Vol. 14, No. 17, 01.09.2006, p. 5963-5972.
Research output: Contribution to journal > Article

Angiotensin II pseudopeptides containing 1,3,5-trisubstituted benzene scaffolds with high AT₂ receptor affinity. / Georgsson, Jennie; Sk  ld, Christian; Plouffe, Bianca; Lindeberg, Gunnar; Botros, Milad; Larh  d, Mats; Nyberg, Fred; Gallo-Payet, Nicole; Gogoll, Adolf; Karl  n, Anders; Hallberg, Anders.

In: Journal of Medicinal Chemistry, Vol. 48, No. 21, 20.10.2005, p. 6620-6631.

Research output: Contribution to journal › Article

New selective AT₂ receptor ligands encompassing a γ -turn mimetic replacing the amino acid residues 4-5 of angiotensin II act as agonists. / Rosenström, Ulrika; Sköld, Christian; Plouffe, Bianca; Beaudry, Hélène; Lindeberg, Gunnar; Botros, Milad; Nyberg, Fred; Wolf, Gunter; Karlén, Anders; Gallo-Payet, Nicole; Hallberg, Anders.

In: Journal of Medicinal Chemistry, Vol. 48, No. 12, 16.06.2005, p. 4009-4024.

Research output: Contribution to journal › Article

Design, synthesis, and biological evaluation, of the first selective nonpeptide AT₂receptor agonist. / Wan, Yiqian; Wallinder, Charlotta; Plouffe, Bianca; Beaudry, Hélène; Mahalingam, A. K.; Wu, Xiongyu; Johansson, Berndt; Holm, Mathias; Botoros, Milad; Karlén, Anders; Pettersson, Anders; Nyberg, Fred; Fändriks, Lars; Gallo-Payet, Nicole; Hallberg, Anders; Alterman, Mathias.

In: Journal of Medicinal Chemistry, Vol. 47, No. 24, 18.11.2004, p. 5995-6008.

Research output: Contribution to journal › Article

Activities

2020

Medical Mini Interviews

Bianca Plouffe (Examiner)

11 Mar 2020

Activity: Examination types › Other examination

Member of the Wellcome Trust Funder Liaison Group Committee (Event)

Bianca Plouffe (Advisor)

31 Jan 2020 → ...

Activity: Membership types › Membership of network

2019

Inaugural Meeting of the European Research Network in Signal Transduction - GPCR Pharmacology: Activation, Signalling and Drug Design

Bianca Plouffe (Participant)

28 Oct 2019 → 30 Oct 2019

Activity: Participating in or organising an event types › Participation in conference

Biochemical Society - Cell Signaling and Intracellular Trafficking in Cancer Biology: Interplay, Targeting and Therapy (Italy) - Endosomal G protein signalling by US28 as a new target for glioblastoma multiforme

Bianca Plouffe (Invited speaker)

23 Oct 2019

Activity: Talk or presentation types › Oral presentation

GDR3545 GPCR International Meeting (France)

Bianca Plouffe (Participant)

09 Oct 2019 → 11 Oct 2019

Activity: Participating in or organising an event types › Participation in conference

Annual Research Symposium from the Centre of Membrane Proteins and Receptors (U.K.)

Bianca Plouffe (Participant)

26 Sep 2019

Activity: Participating in or organising an event types › Participation in conference

2018

Seminar Series - Dept. of Pharmaceutical Chemistry, Philipps University Marburg (Germany) - GPCR, G protein and b-arrestin: three dancers dancing together in the endosome.

Bianca Plouffe (Invited speaker)

12 Jun 2018

Activity: Talk or presentation types › Public lecture/debate/seminar

Seminar Series - Medical School, University of Nottingham (U.K.) - GPCR, G protein and b-arrestin: three dancers dancing together in the endosome.

Bianca Plouffe (Invited speaker)

04 Jun 2018

Activity: Talk or presentation types › Public lecture/debate/seminar

Seminar Series - Dept. of Medicinal Chemistry, Virginia Commonwealth University (USA) - GPCR, G protein and b-arrestin: three dancers dancing together in the endosome.

Bianca Plouffe (Invited speaker)

24 May 2018

Activity: Talk or presentation types › Public lecture/debate/seminar

Experimental Biology 2018 (USA)

Bianca Plouffe (Participant)

21 Apr 2018 → 25 Apr 2018

Activity: Participating in or organising an event types › Participation in conference

2017

18th GPCR Retreat 2017 (Canada)

Bianca Plouffe (Participant)

19 Oct 2017 → 21 Oct 2017

Activity: Participating in or organising an event types › Participation in conference

Seminar Series - Institute for Immunology and Cancer, University of Montreal (Canada) - Identification of residues in human melatonin type 2 receptor involved in signaling selectivity or general signal transmission using natural variants

Bianca Plouffe (Invited speaker)

30 Sep 2017

Activity: Talk or presentation types › Public lecture/debate/seminar

FASEB Science Research Conferences on GRKs and Arrestins: From Structure to Disease (USA)

Bianca Plouffe (Participant)

18 Jun 2017 → 23 Jun 2017

Activity: Participating in or organising an event types › Participation in conference

7th Scientific Day of the Institute for Research in Immunology and Cancer, University of Montreal (Canada) - Human melatonin type 2 receptor structural insights revealed by natural variants

Bianca Plouffe (Invited speaker)

26 May 2017

Activity: Talk or presentation types › Invited or keynote talk at national or international conference

Molecular Pharmacology Gordon Research Conference 2017 (Italy)

Bianca Plouffe (Participant)

12 Mar 2017 → 17 Mar 2017

Activity: Participating in or organising an event types › Participation in conference

Molecular Pharmacology Gordon Research Seminars (Italy) - Human melatonin type 2 receptor structural insights revealed by natural variants

Bianca Plouffe (Invited speaker)

12 Mar 2017

Activity: Talk or presentation types › Invited or keynote talk at national or international conference

2016

17th GPCR Retreat (USA)

Bianca Plouffe (Participant)

13 Oct 2016 → 15 Oct 2016

Activity: Participating in or organising an event types › Participation in conference

Rencontre Louis-Philippe-Bouthillier (Canada)

Bianca Plouffe (Participant)

May 2016

Activity: Participating in or organising an event types › Participation in conference

2015

Institute for Research in Immunology and Cancer Student Recruitment Event (Canada)

Bianca Plouffe (Participant)

18 Jun 2015 → 21 Jun 2015

Activity: Participating in or organising an event types › Participation in Festival/Exhibition

Seminar Series - Institute for Research in Immunology and Cancer, University of Montreal (Canada) - Do you have a bias? GPCRs do!

Bianca Plouffe (Invited speaker)

24 Apr 2015

Activity: Talk or presentation types › Public lecture/debate/seminar

MELA-BETES Joint Translational Call Meeting (France) - Analysis of the human melatonin transduction system using BRET-based biosensors

Bianca Plouffe (Invited speaker)

20 Mar 2015

Activity: Talk or presentation types › Invited or keynote talk at national or international conference

2014

ASCEPT-MPGPCR Joint Scientific Meeting (Australia)

Bianca Plouffe (Participant)

07 Dec 2014 → 11 Dec 2014

Activity: Participating in or organising an event types › Participation in conference

15th GPCR Retreat (Canada)

Bianca Plouffe (Participant)

02 Oct 2014 → 04 Oct 2014

Activity: Participating in or organising an event types › Participation in conference

MELA-BETES Joint Translational Call Meeting (Germany) - Analysis of the human melatonin transduction system using BRET-based biosensors

Bianca Plouffe (Invited speaker)

23 Jun 2014

Activity: Talk or presentation types › Invited or keynote talk at national or international conference

2013

MELA-BETES Joint Translational Call Meeting (Canada) - Functional analysis of the human melatonin transmission system using biosensors

Bianca Plouffe (Invited speaker)

03 Oct 2013

Activity: Talk or presentation types › Invited or keynote talk at national or international conference

XXVIIe Symposium Groupe d'étude des protéines membranaires (Canada)

Bianca Plouffe (Participant)

Jun 2013

Activity: Participating in or organising an event types › Participation in conference

Molecular Pharmacology Gordon Research Conference (Italy)

Bianca Plouffe (Participant)

21 Apr 2013 → 26 Apr 2013

Activity: Participating in or organising an event types › Participation in conference

2012

MELA-BETES Joint Translational Call Meeting (Germany) - Functional analysis of the human melatonin transmission system; new candidates involved in Type 2 Diabetes (T2D)

Bianca Plouffe (Invited speaker)

21 Dec 2012

Activity: Talk or presentation types › Invited or keynote talk at national or international conference

2010

11th GPCR Retreat (Canada)

Bianca Plouffe (Participant)

Jun 2010

Activity: Participating in or organising an event types › Participation in conference

2nd Annual Brain Health Research Day (Canada)

Bianca Plouffe (Participant)

Jun 2010

Activity: Participating in or organising an event types › Participation in conference

2009

1st Annual Brain Health Research Day (Canada)

Bianca Plouffe (Participant)

Jun 2009

Activity: Participating in or organising an event types › Participation in conference

Molecular Pharmacology Gordon Research Conference (Italy)

Bianca Plouffe (Participant)

31 May 2009 → 05 Jun 2009

Activity: Participating in or organising an event types › Participation in conference

2008

9th GPCR Retreat (Canada)

Bianca Plouffe (Participant)

Oct 2008

Activity: Participating in or organising an event types › Participation in conference

Experimental Biology 2008 (USA)

Bianca Plouffe (Participant)

05 Apr 2008 → 09 Apr 2008

Activity: Participating in or organising an event types › Participation in conference

2007

11th Annual Y.D. Lapierre Resident Research Day, University of Ottawa (Canada)

Bianca Plouffe (Participant)

Dec 2007

Activity: Participating in or organising an event types › Participation in conference

8th GPCR Retreat

Bianca Plouffe (Participant)

27 Sep 2007 → 29 Sep 2007

Activity: Participating in or organising an event types › Participation in conference

2006

10th Annual Y.D. Lapierre Resident Research Day (Canada), University of Ottawa (Canada)

Bianca Plouffe (Participant)

Dec 2006

Activity: Participating in or organising an event types › Participation in conference

7th GPCR Retreat (USA)

Bianca Plouffe (Participant)

Oct 2006

Activity: Participating in or organising an event types › Participation in conference

2005

7e Journée Scientifique de l'Équipe de Physiopathologie Endocrinienne (Canada) - Rôle du récepteur TrkA dans la signalisation induite par le récepteur AT2 de l'angiotensine II

Bianca Plouffe (Invited speaker)

May 2005

Activity: Talk or presentation types › Oral presentation

2004

32e Colloque de la Société de Neuroendocrinologie (France)

Bianca Plouffe (Participant)

Sep 2004

Activity: Participating in or organising an event types › Participation in conference

6e Journée Scientifique de l'Équipe de Physiopathologie Endocrinienne (Canada) - L'élongation neuritique induite par le récepteur AT2 de l'angiotensine II est médiée par la transactivation du récepteur NGF

Bianca Plouffe (Invited speaker)

Sep 2004

Activity: Talk or presentation types › Oral presentation